robopec

Reeti's User Guide

Principles and Applications

Summary

1 About 4
2 Reeti's uses 4
2.1 Reeti, the PCBot 4
2.2 Functionalities 4
2.3 Uses 5
2.4 Types of connection on the Reeti 6
3 First Use 8
3.1 Plugs 8
3.2 Firing up 10
3.3 Reeti's Configuration 10
3.4 Connection with iPad / iPhone 12
3.5 Shutting down 13
3.6 Transportation 13
3.7 Blu-Ray / DVD reader 13
4 Home 14
4.1 General information 14
4.2 Launch 14
4.3 Applications 15
4.4 Quick configuration 15
4.4.1 Status indicator 15
4.4.2 Update indicator 15
4.4.3 Help 16
4.4.4 Sound 16
4.4.5 Configuration Wi-Fi 17
4.4.6 Power off button 17
5 RConfiguration 18
5.1 General information 18
5.2 Security 19
5.3 Language 19

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5.4 Network 19
5.5 Home configuration 20
5.6 Mail configuration 21
5.7 Help 22
5.8 Launch Reeti 22
5.9 Logs generation 22
5.10 Developer mode 22
5.11 Access to Ubuntu OS 22
5.12 Bootloader 22
6 Mode without Screen 22
7 iPhone / iPad application 22
7.1 General 23
7.2 Connection and safety instructions 23
7.3 Application 23
7.3.1 RPilot 23
7.3.2 RCamera 24
7.3.3 RConfiguration 24
7.3.4 Rabout 24
8 Special update « Bootloader » 24
9 General Terms 24
10 Contacts and supplementary Information 25

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1 About

About this guide:

In order to reduce our paper consumption and according to our responsible and respectful measures for the environment, Robopec prefers to put online those documents for users instead of printing them.

You can find more information on the website www.reeti.fr on which you will find more examples, tutorials, FAQ, and a Forum for Assistance.

Read carefully this guide and respect the instructions of use in the guide: "Regulations and Warranty" before any use of Reeti. Robopec won't hold responsibility for any dysfunction in case of non-respect of those instructions.

2 Reeti's uses

2.1 Reeti, the PCBot

Reeti is a PCBot, the fusion of a Personal Computer and a robot. He is constituted of a robotic head and a computer in his body.

With his robotic head, he is able to show emotions and interact with the user.

2.2 Functionalities

Reeti can make various actions we are detailing in the next section.

With his two cameras, he can take pictures or shot movies in High Definition. His intelligence allows him to react at what he sees according to the people in front of him or what happens in the room he is in.

Reeti has fifteen degrees of freedom in his head, conferring him great mobility. Indeed, Reeti can move the ears, the neck (tilt, pan, and rotation), the eyes, the eyelid, and the mouth.

Reeti has a text-to-speech module, allowing him to translate every sentence you give him into spoken text. He knows various languages (English, Catalan, Valencian, Galician, French, German, Italian, Greek, Swedish, Dutch, Polish, Portuguese, Chinese, Spanish, Turkish, Finish, Russian, Danish, Norwegian, Arabic, and Romanian) according to the languages you pick when ordering your Reeti.

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Being able to connect to an email service, your fellow can connect to it, read mails and send others to you or other contacts. Thanks to him you are always connected

Reeti can also warn you if an intruder get to your home thanks to his two cameras and his ability to detect people.

Equipped with a Digital Terrestrial Television tuner, a Blu-Ray data reader and a DVD player, Reeti can be a home theater PC for your living room. Watching movies or TV will be simple and fun with Reeti.

Reeti has internal speakers (2x20W RMS, 2x30W power max) allowing you to listen to your music directly from him.

Furthermore, thanks to his complete connection set, you can use Reeti through various devices such as HDMI, DVI, optical fiber, coaxial fiber...

Reeti is a smart Robot. He reacts to some stimuli and you can tune his intelligence through applications to make him react at your will.

2.3 Uses

You can use Reeti in various ways according to the uses you need. Figure 1 shows you the connections available.

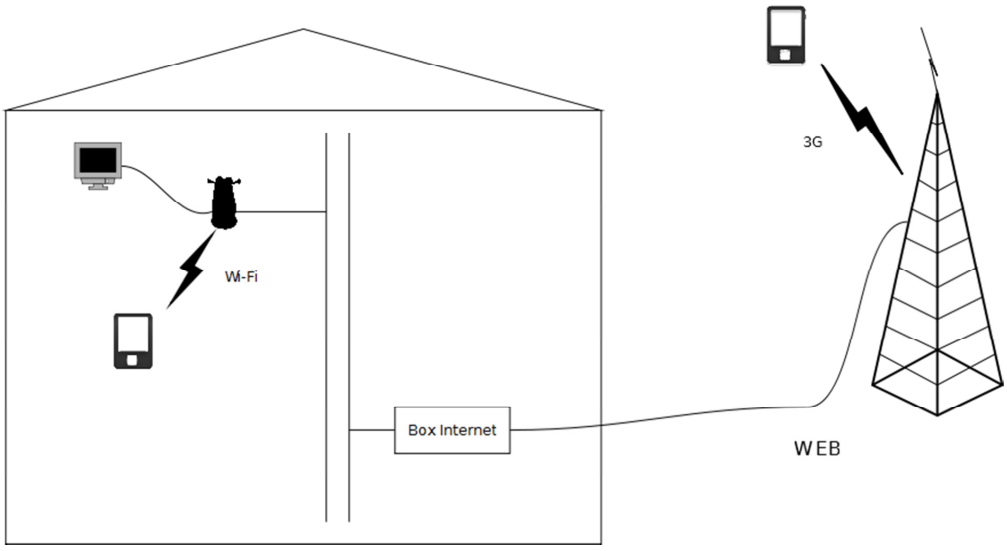

Figure 1 Connections of Reeti

Three modes of uses have been conceived for a use separately or simultaneously.

Direct Mode

Direct mode is the simplest way to use Reeti. Linked to a screen, a keyboard and a mouse, you can interact, control, use applications the way you use a computer with all the robotic possibilities given

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by a PCBot. You also have a complete access to the Operating System Ubuntu, to use your Reeti as a simple personal computer.

Remote mode

The remote mode allows using Reeti from wherever in the world, either in WiFi or 3G through a mobile device Apple, iPad or iPhone. For that purpose, you just have to connect your mobile device to your Reeti through the Reeti application available on Appstore.

Attention! As any IT device which can contain personal data and being connected to the network, we strongly recommend to choose a password difficult to drill (we suggest you 8 letters minimum with figures, special characters and a mixture capital letters-small letters) and to keep it secret.

Autonomous mode

In autonomous mode, Reeti works alone and acts according to his humors and interactions with the outside (tactile sensors, visual sensors, e-mails, orders). This mode is completely compatible with the other modes and can be configured to accept, refuse or even create behavior according to the envy for the users.

2.4 Types of connection on the Reeti

You can connect your Reeti to an outside device (tablet, smartphone, PC) which supports the communication with Reeti (at the moment only iPad / iPhone, Android in preparation) of various manners. Refers to figures below for the various modes:

Figure 2 Ad-Hoc Connection

Reeti create an ad-Hoc network between him and the connected device allowing them to communicate.

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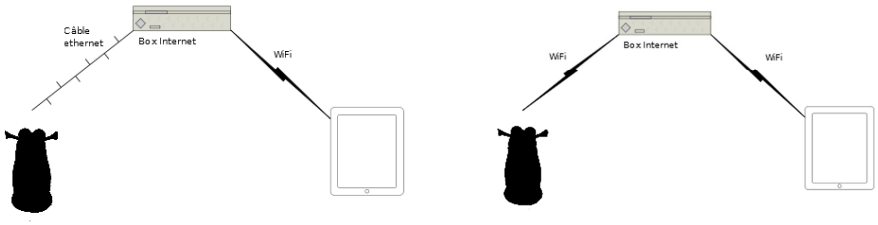

Figure 3 LAN Connection for Reeti

Reeti is connected to a local network via a router in Wifi or in Ethernet and your mobile device connect to this network (see the User guide of your device to know how to connect to a network).

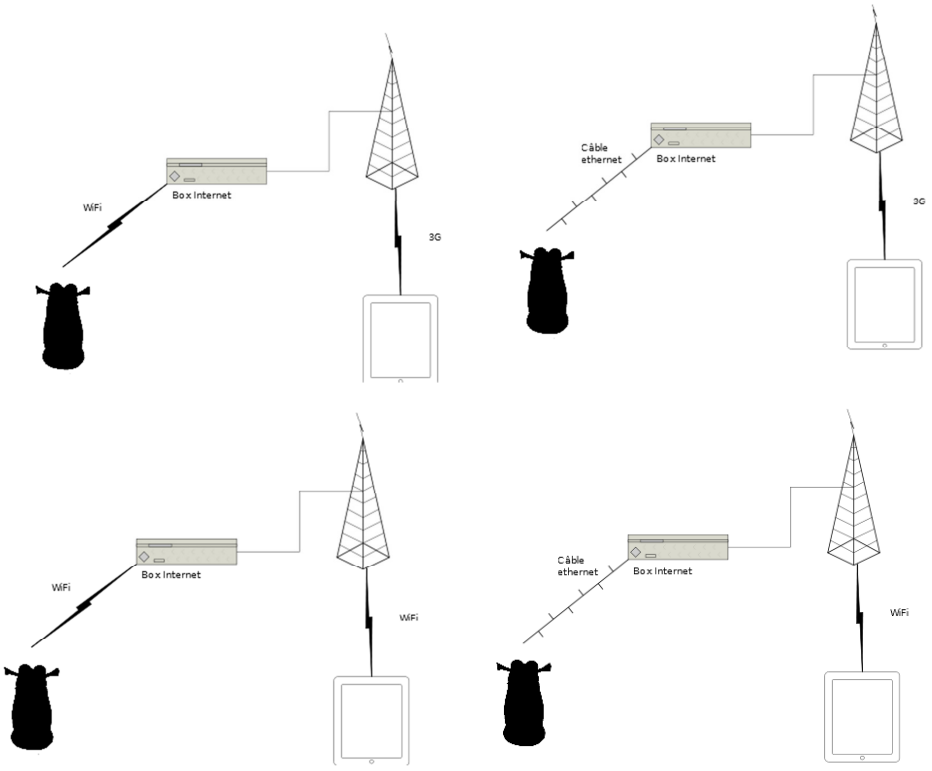

Figure 4 WAN Connection

Reeti is connected to internet via your Internet Service Provider in Wifi or in Ethernet and your mobile device connect to this network (see the User guide of your device to know how to connect to a network) through internet via 3G or WiFi.

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3 First Use

3.1 Plugs

Put Reeti on a plane surface (desk, TV piece of furniture, banks).

The connections of Reeti are under him, to have access to connectors put Reeti on the side.

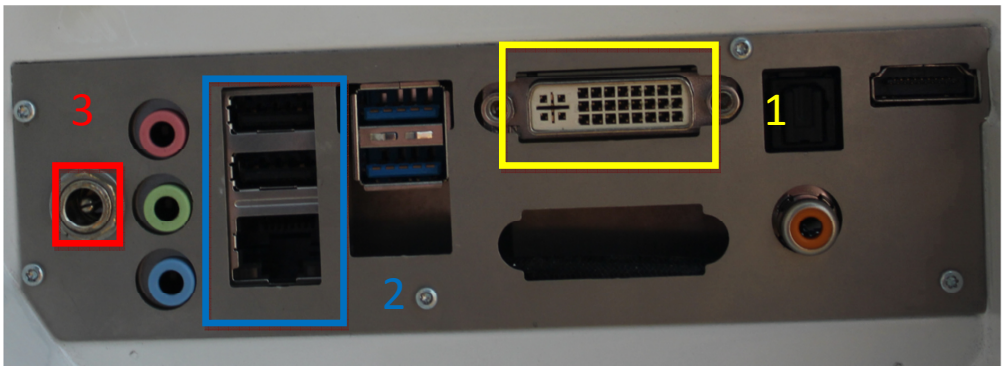

Figure 5 Plugs on Reeti

1. Plug a screen on DVI or on HDMI (Reeti does not support VGA).

We recommand a resolution of 1920x1080 pixels (Full HD).

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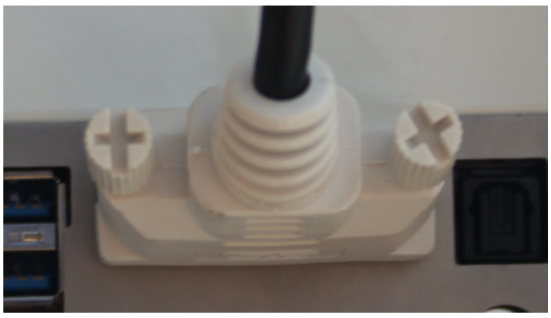

2. Plug a keyboard and a mouse

Options:

- Plug audio device on jack (green).
- Wire Reeti to Ethernet

3. Plug Reeti to power supply (220V)

Never connect a bare cable or not corresponding to the good connector. Reeti must be connected on electric installations up to date to the standards. Never access the connectors with Reeti plugged to power supply

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3.2 Firing up

1. Press on the button situated over the backpack

Figure 6 Firing up button

2. Reeti will automatically goes to his neutral position

Figure 7 Reeti Neutral Position

The Launcher software will then start up. Reeti is started and you can start to use it.

3.3 Reeti's Configuration

Once fired up, you will have to go through some steps to use correctly the Reeti.

1. Accept the End User License Agreement to use the Reeti

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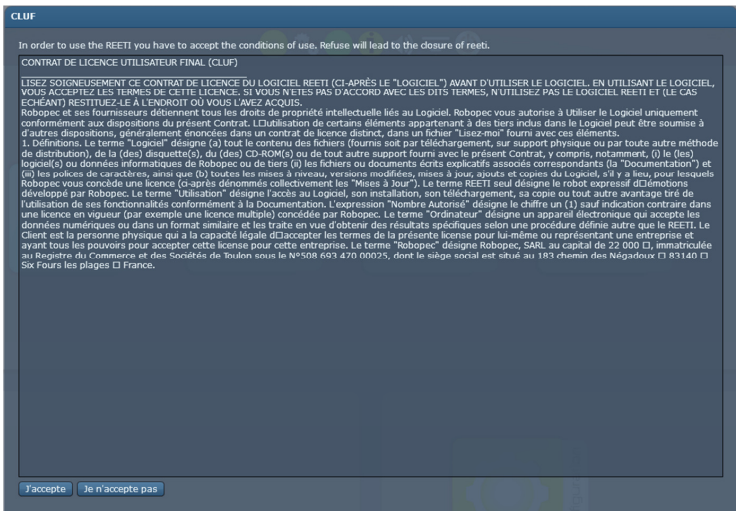
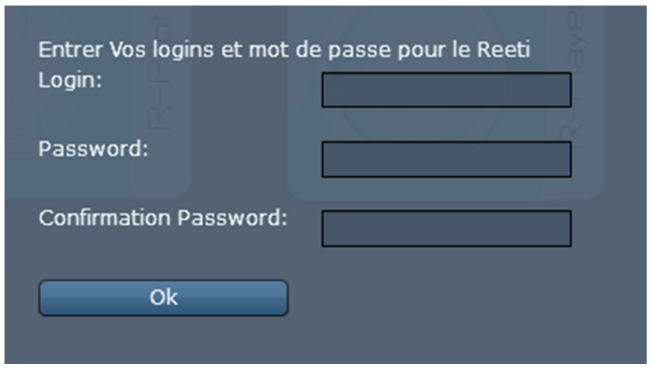
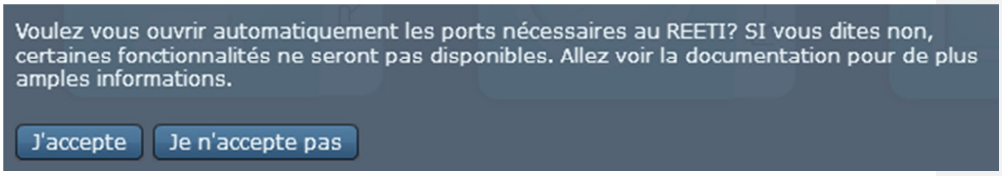


2. Choose your login and password



3. Accept to open port for optimal use of Reeti

Commentaire [e1]: Idem modifier « au reeti » par « à reeti » ;



4. Reeti is Ready and you can use the Launcher

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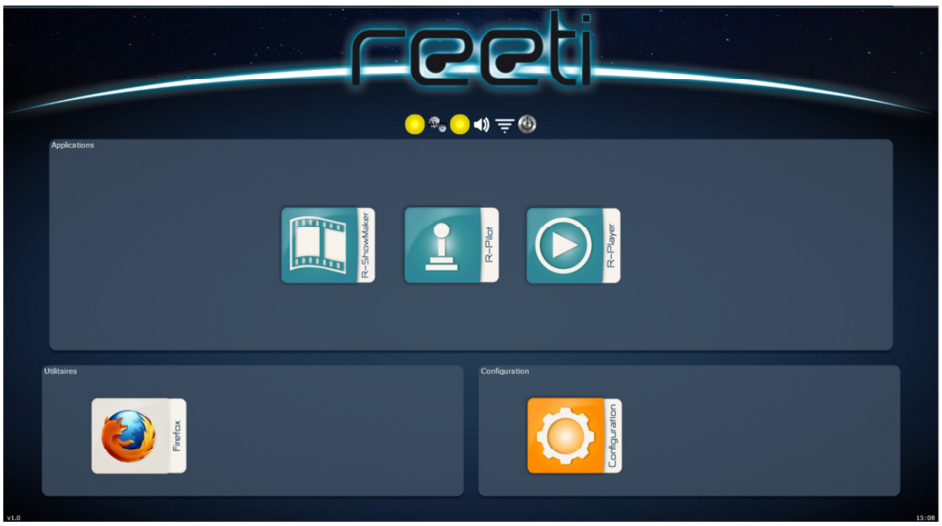

Figure 8 Home page de Reeti.

Refer to the help and tutorials for further information on the already present applications on Reeti and their use. These helps are available in every application. Tutorials, help as well as instructions for use are available on www.reeti.fr.

3.4 Connection with iPad / iPhone

Before connecting with the iPad, make the connection steps 3.3.1 to 3.3.5. If you do not, the application Reeti will not work.

Step to connect to Reeti via your iPad / iPhone:

1. Download the application Reeti available on the App Store.
2. In Settings -> Wifi, connect your device on the same network as Reet.
3. Launch the application Reeti
4. Configure the application:
    a. In RConfig-> IPConfig: assign the IPv4 address of Reeti (available on the interface of your box or with your Reeti).
    b. In RConfig -> Login to enter your login and password, it is the same as you have filled in 4.3.
5. Return to the home, the application is connected (green light).

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Figure 9 Home of Reeti application

The iPad is a mobile device, with your login and password anyone can log on Reeti and have access to its functionality. Do not give your password to anyone.

3.5 Shutting down

To shut down Reeti click on the power button , then shutdown. Wait for Reeti to be fully shut down before unplug him.

If you unplug Reeti from general power, please wait 4à seconds before plugging him back.

3.6 Transportation

If you need to transport Reeti, do not carry it upside down and avoid collisions as Reeti is a precision machine. Robopec offers a suitable carrying case (information on www.reeti.fr).

3.7 Blu-Ray / DVD reader

Reeti backpack holds a DVD / Blu-Ray data reader. The DVD or Blu-Ray has to be inserted as in the picture below:

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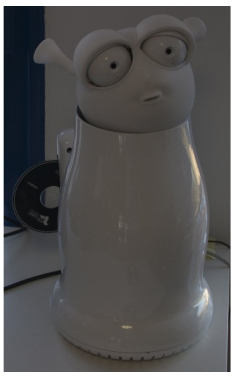

Figure 10 DVD insertion

4 Home

4.1 General information

Reeti's home is where you find all the applications you have downloaded on Reeti. The applications available on the desktop are delivered with Reeti, but you can download new on the site www.reeti.fr as and when they are developed by our staff or the community Reeti. You can also-and we encourage you- to develop your own applications, that will meet your needs. The Home also includes a number of shortcuts setup (Quick Setup bar) that manage a number of parameters Reet.

Figure 11 Reeti's home. Yellow bar: quick setup, robotic applications in blue, in white utilities, in orange advanced configuration.

4.2 Launch

Reeti's Home launch automatically at startup and always relaunch itself on case of bug.

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4.3 Applications

There are three types of applications you can use on Reeti:

- Robotic applications that use the robotic features such as RShowMaker or RPilot included with Reeti.

- Applications of advanced configuration for configuring a number of advanced settings. Should be used with caution, it can change a number of parameters essential to robot.

- Applications that allow running the PC tools that you used for word processing, web browser...

4.4 Quick configuration

The quick configuration icons allow you to quickly configure your Reeti.

Figure 12 Quick Setup bar. From left to right: status indicator, automatic behavior, updates, information, sound, wireless, power off.

4.4.1 Status indicator

The status light lets you see if your Reeti is ready and has all his abilities. This LED has three states:
- Green: Reeti is fully functional, no problems known.
- Orange: Reeti attempts to boot.
- Red: a problem occurred; the light must pass to orange quickly if it tries to solve the problem. If the light remains red, the problem is more serious, please refer to the FAQ section.

4.4.2 Update indicator

Reeti is evolving from our developers. Reeti goes every day to inquire whether new features or updates have been developed and offer them. If the light is:

- Green, the system is updated and no new features have been proposed.
- Red, the system is out of date. Click the icon to bring up the menu of choice of updates you want installed.

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Figure 13 Update panel control

You can select the updates you want. Two types of updates will appear:

- New applications in green.
- In orange, updates of existing applications.

On OK, you begin the process of updating. Check button allows you to check for updates.

4.4.3 Help

By clicking on help, a panel will show up with some information about your connection and your Reeti.

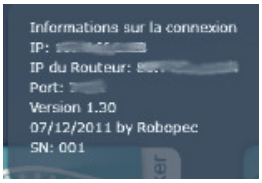

Figure 14 Information panel

On the panel you have access to the IP address of Reeti on the local network, the IP address of your Internet access, the port on which contact Reeti, and the version of your software Reeti.

4.4.4 Sound

You can control the volume of the Reeti through this icon.

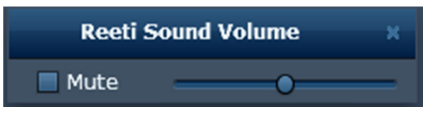

Figure 15 Sound

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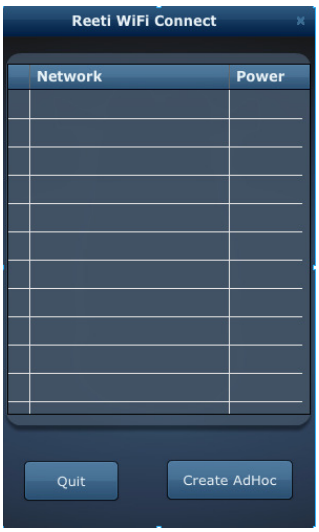
4.4.5 Configuration Wi-Fi

This option opens a panel allowing you to connect to network over WiFi:



A list of available networks is displayed with the associated signal strength. The power indicates the stability of your connection. If you are already connected to one of the available networks, then the connection will be preceded by the symbol "√".

To connect to one of the available networks, you must double click on the name of the desired one. Two cases are possible:

- The network does not require a password: Reeti then connects directly to the network. No specific action on your part will be required.
- The network requires a password for authentication (WEP, WPA or AdHoc). A window will appear asking you to enter the password if you've never done before.

You can also create an AdHoc network type. To do this, you must click on "Create AdHoc" at the bottom right of the window. You will be asked a name to complete the creation.

4.4.6 Power off button

Clicking on this button led you to choose between shutdown and restart Reeti.

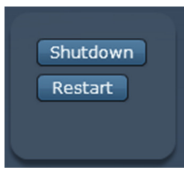


Figure 16 Shutdown panel

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5 RConfiguration

5.1 General information

Figure 17 RConfiguration

The application RConfiguration, located in the Configuration at the bottom right of the Office, allows advanced configuration of Reeti. The settings you change in RConfiguration can change the behavior of your Reeti. So you must use them sparingly and be careful during these manipulations. You have access to five Advanced Configuration tabs in this application:

- Network configuration
- Configuration of language
- Security
- Configuring the desktop and applications
- Configuration of mail contact
- Help
- Launch Reeti
- Logs generation
- Developer mode
- Access to Ubuntu OS
- Bootloader Restart

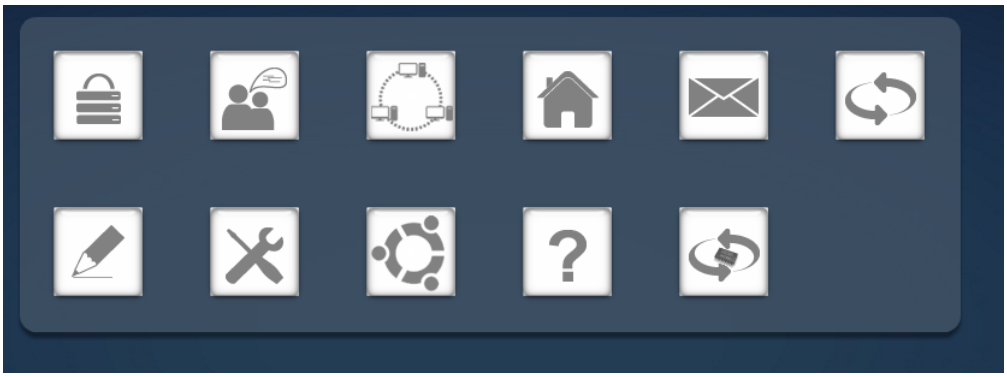

Figure 18 RConfiguration Application

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5.2 Security

In this menu you can change your login and access code to Reeti. To do so, enter your password in the first text field. Then enter the desired username and desired password in duplicate. Validate to change your password and login. Cancel to return to the home of RConfiguration.

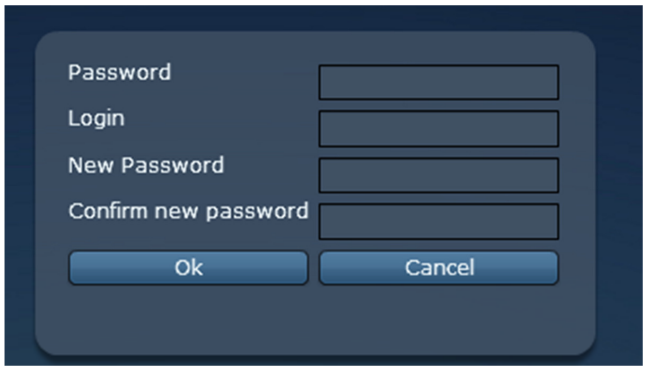

Figure 19 Panel for Password and Login configuration.

5.3 Language

The configuration language allows you to choose the language of the desktop and applications in your Reeti. Choose a language, validate and Reeti returns to the desktop in its English, Spanish or French version.

Figure 20 Language choice

5.4 Network

This configuration allows you to open automatically port for use or for maintenance in case of technical issues:

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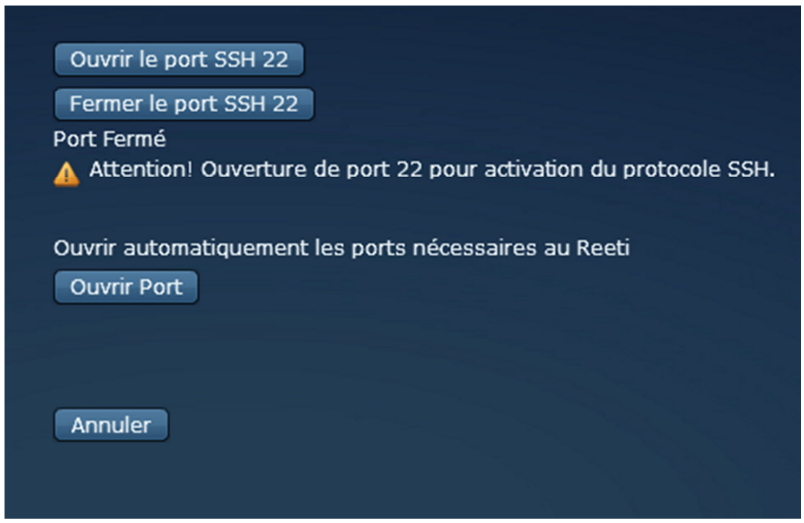

Figure 21 Network configuration

You can:

- Open maintenance port
- If you didn't accept to open the port at first startup or if you moved your Reeti, you can open automatically the port of your Reeti for optimal usage.

5.5 Home configuration

In this menu you can choose the applications you want to appear on the desktop. You can add applications or delete them.

Figure 22 Configuration of the home

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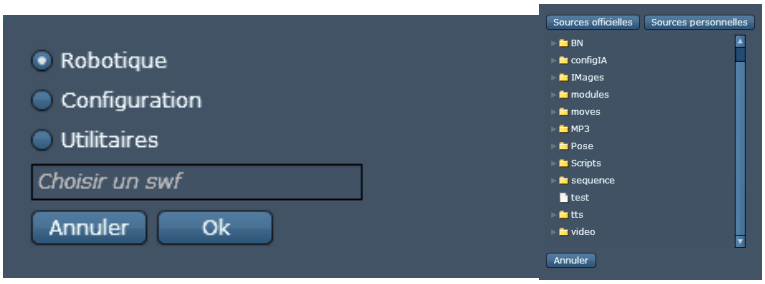
By clicking on +, you can add a new application, you come to this windows where you can find application listed either in official sources (given by Robopec) or in personal sources (yours or third-part application).

In the list choose a valid application and it will be added on the correct border (Robotic, Configuration, Utilities).



5.6 Mail configuration

You can configure Reeti for it to send you mail. To do this, Reeti needs two things:

- An e-mail contact
- The address of the SMTP server of your ISP

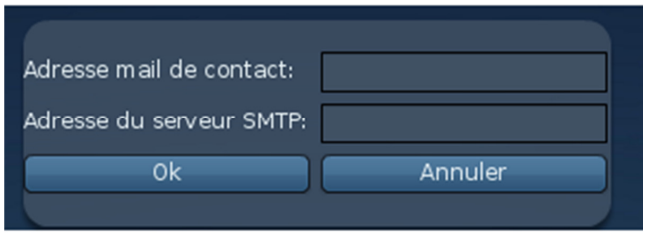


Figure 23 Configuration du mail

Here are some adress for French ISP SMTP:

9 Telecom : smtp.neuf.fr

ALICE ADSL : smtp.alice.fr , smtp.aliceadsl.fr

AOL : smtp.aol.com

Bouygues BBOX : smtp.bbox.fr

Bouygues Télécom : smtp.bouygtel.fr

CLUB INTERNET : mail.club-internet.fr

DARTY BOX : smtp.live.com

FREE : smtp.free.fr

FREESURF : smtp.freesurf.fr

IFrance : smtp.ifrance.com

MAGIC ONLINE : smtp.magic.fr

NERIM : smtp.nerim.net

NOOS : mail.noos.fr

Numéricable : smtp.numericable.fr

ORANGE : smtp.orange.fr

SYMPATICO : smtp1.sympatico.ca

SFR : smtp.sfr.fr

TISCALI : smtp.tiscali.fr

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TISCALI-FREESBEE : smtp.freesbee.fr WANADOO : smtp.wanadoo.fr

5.7 Help

Clicking on this button gives you access to all help documentation on Reeti.

5.8 Launch Reeti

Relaunch the Reeti by clicking on this button without relaunching the computer.

5.9 Logs generation

In case of issues and after a member of support asks you, generate Reeti's logs and send the file logs.tar to support@reeti.fr.

5.10 Developer mode

To access dev mode, click here and the automatic functions will be disabled. You can then launch the reetiDev.Sh script to gain access to dev mode.

5.11 Access to Ubuntu OS

This button minimize the Launcher, giving you access to Ubuntu. You can then maximize again the Launcher to have your Reeti back again.

5.12 Bootloader

See section 7 Bootloader, Special updates.

6 Mode without Screen

You can boot your Reeti without a screen; in this case, use your iPad to play with him.
All functionalities will be available. If you plug a screen after firing him up, the display will be in degraded mode, you can come back to normal screen mode by restarting him with the screen attached.
To shut down Reeti in no screen mode, just press once the power button on his backpack and after 1 minute he will shutdown.

7 iPhone / iPad application

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7.1 General

The application iPad / iPhone is available on the App Store by searching for the keyword Reeti in the search bar. Install this application (see the manual provided by Apple, if you have any problems at this stage) to take advantage of all features of your mobile Reeti.

7.2 Connection and safety instructions

To use Reeti mobile version, you must first connect your Reeti application. When you first launch the application Reeti, the application cannot connect to Reeti, the status LED is red and applications are not accessible.

Go to RConfig -> Advanced Options and enter the external address of Reeti and the communication port Reeti (information available via the information button on Home see 4.4.4). Then come back in RConfig -> IP Config and enter the local IP address of Reet and validate.

Finally, enter your password and your username in RConfig -> Identification. Once back on the home screen of the application, the application will connect to Reeti and you will have access to all features. The status LED lights green when connected to the robot and everything works.

Figure 23 Home of Reeti application on iPad

7.3 Application

Once the connection is made with Reeti, you can use all the features of mobile Reeti.

7.3.1 RPilot

RPilot can drive Reeti. You can move each axis of Reeti to put him in a desired position and. Thanks to the choice of color in the lower area of the application, you can give your Reeti colors depending on his moods, and yours. Pressing the button ''record'', you creation will be saved and you can reuse in other Reeti applications.

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In addition, a text box at the top of the application allows you to make him say a phrase. Accelerometer button enables or disables the motion sensors of the iPad. Activated, you can control the neck by tilting the iPad forward, backward, left or right.

7.3.2 RCamera

RCam application shows what sees Reeti live. You can, through this application, take a picture and share it on facebook, e-mail. You can move Reeti to control where does it look.

7.3.3 RConfiguration

In this menu you can configure a number of options:

- Your Facebook account
- The local address of Reeti
- Your login in order to contact Reeti
- The external addresses access to Reeti

7.3.4 Rabout

Some practical information about the application and Reeti.

8 Special update « Bootloader »

When you update the package named « Bootloader », you have to manually do some actions in order to the update to be effective:

1. Go to the configuration application on Reeti.
2. Touch the left cheek of Reeti.
3. Click on Reset PIC in Configuration

9 General Terms

Pose: Position specific of Reeti, with a color for the diodes.

Sequence: A sequence of moves, words and functions.

IP: Internet Protocol.

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10 Contacts and supplementary Information

The Reeti is designed by Robopec, SARL with a capital of € 22 000, registered in the Trade and Companies of Toulon under number 508 693 470 0002 5, whose head office is located at 183 chemin des Négadoux - 83140 - Six Fours Les Plages - France.

You can contact Robopec or for more information about the Reeti on www.reeti.fr or by writing to contact@reeti.fr.

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